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SEQUENCE LISTING

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<120> Selection System

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<150> GB 9810223.9

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<170> PatentIn version 3.1

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<223> Synthetic linker peptide sequence with protease recognition sites

<220>

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<222> (1)..(17)

<223> Synthetic linker peptide sequence with protease recognition sites

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Pro	Ala	Gly	Leu	Ser	Glu	Gly	Ser	Thr	Ile	Glu	Gly	Arg	Gly	Ala	His
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Glu

<210> 2

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<223> Synthetic PCR primer for vector construction/screening

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ggcacctca gaacgtacc ccacctcag aggccggctg ggccgccacc ctcagag 57

<210> 3

<211> 89

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<222> (1)..(89)

<223> Synthetic PCR primer for vector construction/screening

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ggtggcggcc cagccggcct ttctgagggg tcgactatag aaggacgagg gcccagcgaa 60
ggaggtgggg tacccttc tgaggggtgg 89

<210> 4

<211> 89

<212> DNA

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<222> (1)..(89)

<223> Synthetic PCR primer for vector construction/screening

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ccaccctcag aagggggtac cccacctcct tcgctgggce ctgcctcttc tatagtcgac 60
ccctcagaaa ggccggctgg gccgccacc 89

<210> 5
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<223> Synthetic PCR primer for vector construction/screening

<400> 5
gcgatgggtg ttgtcattgt cggc 24

<210> 6
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aaaagaaacg caaagacacc acgg

24

<210> 7

<211> 23

<212> DNA

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<222> (1)..(23)

<223> Synthetic PCR primer for vector construction/screening

<400> 7
cctcctgagt acggtgatac acc

23

<210> 8

<211> 24

<212> DNA

<213> Artificial sequence

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<223> Synthetic PCR primer used to screen for recombinant clones.

<220>

<221> misc_feature

<222> (1)..(24)

<223> Synthetic PCR primer used to screen for recombinant clones

<400> 8
gtaaattcag agactgcgct ttcc

24

<210> 9

<211> 26

<212> DNA

<213> Artificial sequence

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<223> Synthetic PCR primer used to screen for recombinant clones.

<220>

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<222> (1)..(26)

<223> Synthetic PCR primer used to screen for recombinant clones

<400> 9
attttcggtc atagccccct tattag

26

<210> 10

<211> 65

<212> DNA

<213> Artificial sequence

<220>

<223> Synthetic PCR primer recognizing FLAG tag nucleotide sequence.

<220>

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<222> (1)..(65)

<223> Synthetic PCR primer recognizing FLAG tag nucleotide sequence

<400> 10
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 agcaa 65

<210> 11

<211> 51

<212> DNA

<213> Artificial sequence

<220>

<223> Synthetic PCR primer used to change codon usage in recombinant clones.

<220>

<221> misc_feature

<222> (1)..(51)

<223> Synthetic PCR primer used to change codon usage in recombinant clones

<400> 11
 cccctcagaa aggccggctg ggccgccgcc agcattgaca ggaggttcag g 51

<210> 12

<211> 52

<212> DNA

<213> Artificial sequence

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<223> Synthetic PCR primer used to change codon usage in recombinant clones.

<220>

<221> misc_feature

<222> (1)..(52)

<223> Synthetic PCR primer used to change codon usage in recombinant clones

<400> 12
gaaggaggtg gggtagcccg ttccgagggt gggtccggtt ccggtgattt tg 52

<210> 13

<211> 36

<212> DNA

<213> Artificial sequence

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<220>

<221> misc_feature

<222> (1)..(36)

<223> Synthetic PCR primer for vector construction/screening

<400> 13
ccctcggaac cggtagcccca gctgcttcgt gggccc 36

<210> 14

<211> 47

<212> DNA

<213> *Bacillus amyloliquefaciens*

<400> 14
ctggcgggcgg ccagccggc cctgcacagg ttatcaacac gtttgac 47

<210> 15

<211> 43

<212> DNA

<213> Bacillus amyloliquefaciens

<400> 15
ctcgggaaccg gtacctctga tttttgtaaa ggtctgataa gcg 43

<210> 16

<211> 44

<212> DNA

<213> Gallus gallus

<400> 16
ggcggcccag ccggcctttc tctctctgac gaggacttca aggc 44

<210> 17

<211> 41

<212> DNA

<213> Gallus gallus

<400> 17
cctcgggaacc ggtaccgaag agtcctttct ccttcttgag g 41

<210> 18

<211> 18

<212> DNA

<213> Artificial sequence

<220>

<223> Synthetic PCR primer used for library construction.

<220>

<221> misc_feature

<222> (1)..(18)

<223> Synthetic PCR primer used for library construction

<400> 18
tacgccaagc ttgcatgc

18

<210> 19

<211> 17

<212> DNA

<213> Artificial sequence

<220>

<223> Synthetic PCR primer used for library construction.

<220>

<221> misc_feature

<222> (1)..(17)

<223> Synthetic PCR primer used for library constuction

<400> 19
ctgcacctgg gccatgg

17

<210> 20

<211> 17

<212> DNA

<213> Artificial sequence

<220>

<223> Synthetic PCR primer used for library construction.

<220>

<221> misc_feature

<222> (1)..(17)

<223> Synthetic PCR primer used for library construction

<400> 20
gattacgcca agctttg

17

<210> 21

<211> 126

<212> DNA

<213> *Erwinia chrysanthemi*

<220>

<221> misc_feature

<223> n at positions 23, 24, 29, 55, 56, 81, 97, 101, and 102 can be G,
A, T or C

<220>

<221> misc_feature

<222> (23)..(23)

<223> n at position 23 can be G, A, T or C

<220>

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<222> (24)..(24)

<223> n at position 24 can be G, A, T or C

<220>

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<222> (29)..(29)

<223> n at position 29 can be G, A, T or C

<220>

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<223> n at position 55 can be G, A, T or C

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<222> (56)..(56)
<223> n at position 56 can be G, A, T or C

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<222> (81)..(81)
<223> n at position 81 can be G, A, T or C

<220>
<221> misc_feature
<222> (97)..(97)
<223> n at position 97 can be G, A, T or C

<220>
<221> misc_feature
<222> (101)..(101)
<223> n at position 101 can be G, A, T or C

<220>
<221> misc_feature
<222> (102)..(102)
<223> n at position 102 can be G, A, T or C

<400> 21
gattacgcca agcttgcatg cannddctnt dtcaaggaga cagtcataat garrnnbcta 60
ttgsyaayrs yasyasyagb nttgttatta ctcsyanycv nncygdccat ggcccaggtg 120
cagctg 126

<210> 22

<211> 117

<212> DNA

<213> Bacteriophage M13mp18

<220>

<221> misc_feature

<222> (18)..(18)

<223> Nucleotide at position 18 can be G, A, T or C.

<220>

<221> misc_feature

<222> (19)..(19)

<223> Nucleotide at position 19 can be G, A, T or C.

<220>

<221> misc_feature

<222> (20)..(20)

<223> Nucleotide at position 20 can be G, A, T or C.

<220>

<221> misc_feature

<222> (21)..(21)

<223> Nucleotide at position 21 can be G, A, T or C.

<400> 22
gattacgcca agctttgnnn ncttttttww ggagattttc aacrtgaraa rattattatt 60
csyaattsytt tagttsyts ytttctwtgy ggyccagccg gccatggccc aggtgca 117

<210> 23

<211> 18

<212> DNA

<213> Artificial sequence

<220>

<223> Synthetic PCR primer used for vector construction.

<400> 23
ctttatgctt cggctcg 18

<210> 24

<211> 17

<212> DNA

<213> Artificial sequence

<220>

<223> Synthetic PCR primer for library construction.

<220>

<221> misc_feature

<222> (1)..(17)

<223> Synthetic PCR primer for library construction

<400> 24
cggccccatt cagatcc 17

<210> 25

<211> 50

<212> DNA

<213> Artificial sequence

<220>

<223> Randomized E. chrysanthemi pelB sequence.

<220>

<221> misc_feature

<222> (1)..(50)

<223> Randomized E. chrysanthemi pelB sequence

<400> 25

aagcttgcat gcaaattcta tdtcaaggag acagttataa tgaaatacct

50

<210> 26

<211> 50

<212> DNA

<213> Artificial sequence

<220>

<223> Randomized E. chrysanthemi pelB sequence.

<220>

<221> misc_feature

<222> (1)..(50)

<223> Randomized E. chrysanthemi pelB sequence

<220>

<221> misc_feature

<222> (14)..(14)

<223> n at position 14 can be G, A, T or C.

<220>

<221> misc_feature

<222> (15)..(15)

<223> n at position 15 can be G, A, T or C.

<220>

<221> misc_feature

<222> (20)..(20)

<223> n at position 20 can be G, A, T or C.

<220>

<221> misc_feature

<222> (45)..(45)

<223> n at position 45 can be G, A, T or C.

<220>

<221> misc_feature

<222> (46)..(46)

<223> n at position 46 can be G, A, T or C.

<400> 26

aagcttgcat gcannddctn tdtcaaggag acagtcataa tgarrnnbct

50

<210> 27

<211> 50

<212> DNA

<213> Artificial sequence

<220>

<223> Randomized E. chrysanthemi pelB sequence.

<220>

<221> misc_feature

<222> (1)..(50)

<223> Randomized E. chrysanthemi pelB sequence

<400> 27

aagcttgcat gcagcatctc tdgcaaggag acagtcataa tgaagacgct

50

<210> 28

<211> 50

<212> DNA

<213> Artificial sequence

<220>

<223> Randomized E. chrysanthemi pelB sequence.

<220>

<221> misc_feature

<222> (1)..(50)

<223> Randomized E. chrysanthemi pelB sequence

<400> 28

aagcttgcat gcacgggctg tdtcaaggag acagtcataa tgagagggct

50

<210> 29

<211> 50

<212> DNA

<213> Artificial sequence

<220>

<223> Randomized E. chrysanthemi pelB sequence.

<220>

<221> misc_feature

<222> (1)..(50)

<223> Randomized E. chrysanthemi pelB sequence

<400> 29

aagcttgcac gcaccagctc tdtcaaggag acagtcataa tgaggcggct

50

<210> 30

<211> 55

<212> DNA

<213> Artificial sequence

<220>

<223> Randomized E. chrysanthemi pelB sequence.

<220>

<221> misc_feature

<222> (1)..(55)

<223> Randomized E. chrysanthemi pelB sequence

<400> 30

attcctaacg gcagccgctg gattggttatt actcgcgggc cagccggcca tggcc

55

<210> 31

<211> 55

<212> DNA

<213> Artificial sequence

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<223> Randomized E. chrysanthemi pelB sequence.

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<221> misc_feature

<222> (1)..(55)

<223> Randomized E. chrysanthemi pelB sequence

<220>

<221> misc_feature

<222> (22)..(22)

<223> n at position 22 can be G, A, T or C.

<220>

<221> misc_feature

<222> (38)..(38)

<223> n at position 38 can be G, A, T or C.

<220>

<221> misc_feature

<222> (42)..(42)

<223> n at position 42 can be G, A, T or C.

<220>

<221> misc_feature

<222> (43)..(43)

<223> n at position 43 can be G, A, T or C.

<400> 31

attgsyaayr syasyasyag bnttggtatt actcsyanyc vnncygdcca tggcc

55

<210> 32

<211> 55
 <212> DNA
 <213> Artificial sequence

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 <220>
 <221> misc_feature
 <222> (1)..(55)
 <223> Randomized E. chrysanthemi pelB sequence

 <400> 32
 attgcyaatg gtactgtyag gattgttatt actcccaccc ggtccgtcca tggcc 55

 <210> 33
 <211> 55
 <212> DNA
 <213> Artificial sequence

 <220>
 <223> Randomized E. chrysanthemi pelB sequence.
 <220>
 <221> misc_feature
 <222> (1)..(55)
 <223> Randomized E. chrysanthemi pelB sequence

 <400> 33
 attgcyaatg ctagtgcyyag gggtgttatt actcccaatc gcgccggcca tggcc 55

 <210> 34
 <211> 54

<212> DNA

<213> Artificial sequence

<220>

<223> Randomized E. chrysanthemi pelB sequence.

<220>

<221> misc_feature

<222> (1)..(54)

<223> Randomized E. chrysanthemi pelB sequence

<220>

<221> misc_feature

<222> (22)..(22)

<223> n at position 22 can be G, A, T or C.

<220>

<221> misc_feature

<222> (43)..(43)

<223> n at position 43 can be G, A, T or C.

<220>

<221> misc_feature

<222> (44)..(44)

<223> n at position 44 can be G, A, T or C.

<400> 34

attggttaata gcagcagtag bnttgtagg actcgacccc ccnncyadcc atgg

54

<210> 35

<211> 22

<212> PRT

<213> *Erwinia chrysanthemi*

<400> 35

Met Lys Tyr Leu Leu Pro Thr Ala Ala Ala Gly Leu Leu Leu Leu Ala
1 5 10 15

Ala Gln Pro Ala Met Ala
20

<210> 36

<211> 22

<212> PRT

<213> Artificial sequence

<220>

<223> Randomized *E. chrysanthemi* pelB sequence.

<220>

<221> MISC_FEATURE

<222> (1) .. (22)

<223> Randomized *E. chrysanthemi* pelB sequence

<400> 36

Met Lys Thr Leu Ala Met Val Leu Val Gly Gly Pro Pro Gly Pro Ser
1 5 10 15

Ala Gln Pro Ala Met Ala
20

<210> 37

<211> 21

<212> PRT

<213> Artificial sequence

<220>

<223> Randomized E. chrysanthemi pelB sequence.

<220>

<221> MISC_FEATURE

<222> (1)..(21)

<223> Randomized E. chrysanthemi pelB sequence

<400> 37

Met	Arg	Gly	Leu	Ala	Met	Leu	Val	Ala	Gly	Gly	Pro	Ile	Ala	Pro	Ala
1				5					10					15	

Gln	Pro	Ala	Met	Ala
			20	

<210> 38

<211> 23

<212> PRT

<213> Artificial sequence

<220>

<223> Randomized E. chrysanthemi pelB sequence.

<220>

<221> MISC_FEATURE

<222> (1)..(23)

<223> Randomized E. chrysanthemi pelB sequence

<400> 38

Met	Arg	Arg	Leu	Val	Pro	Ile	Thr	Ala	Ala	Val	Gly	Leu	Leu	Ala	Pro
1				5					10					15	

Pro Thr Gln Pro Ala Met Ala
20

<210> 39

<211> 50

<212> DNA

<213> Artificial sequence

<220>

<223> Randomized bacteriophage M13 g3 sequence.

<220>

<221> misc_feature

<222> (1)..(50)

<223> Randomized bacteriophage M13 g3 sequence

<400> 39

aagcttttggga cgctttttttt tggagatttt caacgtgaaa aaattattat

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<210> 40

<211> 50

<212> DNA

<213> Artificial sequence

<220>

<223> Randomized bacteriophage M13 g3 sequence.

<220>

<221> misc_feature

<222> (9)..(9)

<223> n at position 9 is can be G, A, t or C.

<220>
 <221> misc_feature
 <222> (1)..(50)
 <223> Randomized bacteriophage M13 g3 sequence

<220>
 <221> misc_feature
 <222> (10)..(10)
 <223> n at position 10 is can be G, A, t or C.

<220>
 <221> misc_feature
 <222> (11)..(11)
 <223> n at position 11 is can be G, A, t or C.

<220>
 <221> misc_feature
 <222> (12)..(12)
 <223> n at position 12 is can be G, A, t or C.

<400> 40
 aagctttggnn nncttttttw wggagatttt caacrtgara arattattat

50

<210> 41
 <211> 50
 <212> DNA
 <213> Artificial sequence

<220>

<223> Randomized bacteriophage M13 g3 sequence.

<220>

<221> misc_feature

<222> (1)..(50)

<223> Randomized bacteriophage M13 g3 sequence.

<400> 41

aagctttggg gccttttttt aggagatttt caacatgaga agattattat

50

<210> 42

<211> 50

<212> DNA

<213> Artificial sequence

<220>

<223> Randomized bacteriophage M13 g3 sequence.

<220>

<221> misc_feature

<222> (1)..(50)

<223> Randomized bacteriophage M13 g3 sequence

<400> 42

tcgcaattcc tttagttggt cctttctatg cggcccagcc ggccatggcc

50

<210> 43

<211> 50

<212> DNA

<213> Artificial sequence

<220>

<223> Randomized bacteriophage M13 g3 sequence.

<220>

<221> misc_feature

<222> (1)..(50)

<223> Randomized bacteriophage M13 g3 sequence

<400> 43

tcsyaattsy tttagttsyt sytttctwtg yggycagcc ggccatggcc

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<210> 44

<211> 50

<212> DNA

<213> Artificial sequence

<220>

<223> Randomized bacteriophage M13 g3 sequence.

<220>

<221> misc_feature

<222> (1)..(50)

<223> Randomized bacteriophage M13 g3 sequence

<400> 44

tcctaattcc tttagttggt gctttctatg tggccagcc ggccatggcc

50

<210> 45

<211> 22

<212> PRT

<213> Artificial sequence

<220>

<223> Randomized bacteriophage M13 g3 sequence.

<220>

<221> MISC_FEATURE

<222> (1)..(22)

<223> Randomized bacteriophage M13 g3 sequence

<400> 45

Met Lys Lys Leu Leu Phe Ala Ile Pro Leu Val Val Pro Phe Tyr Ala
1 5 10 15

Ala Gln Pro Ala Met Ala
20

<210> 46

<211> 22

<212> PRT

<213> Artificial sequence

<220>

<223> Randomized bacteriophage M13 g3 sequence.

<220>

<221> MISC_FEATURE

<222> (1)..(22)

<223> Randomized bacteriophage M13 g3 sequence

<400> 46

Met Arg Arg Leu Leu Leu Ala Pro Pro Val Ala Val Pro Phe Tyr Val
1 5 10 15

Val Gln Pro Ala Met Ala
20

<210> 47

<211> 18

<212> DNA

<213> Artificial sequence

<220>

<223> Synthetic oligonucleotide primer used as a substrate for Stoffel fragment of *Thermus aquaticus* DNA polymerase I.

<220>

<221> misc_feature

<222> (1)..(18)

<223> Synthetic oligonucleotide primer used as substrate for Stoffel fragment of *Thermus aquaticus* DNA polymerase I

<400> 47

tttcgcaaga tgtggcgt

18

<210> 48

<211> 12

<212> DNA

<213> Artificial sequence

<220>

<223> Synthetic oligonucleotide primer used as a substrate for *Thermus aquaticus* DNA polymerase I.

<220>

<221> misc_feature

<222> (1)..(12)

<223> Synthetic primer used as substrate for Stoffel fragment of *Thermus aquaticus* DNA polymerase I

<400> 48

gcgaagatgt gg

12

<210> 49
 <211> 30
 <212> DNA
 <213> Artificial sequence

 <220>
 <223> Synthetic oligonucleotide primer used as a substrate for *Thermus aquaticus* DNA polymerase I.
 <220>
 <221> misc_feature
 <222> (1)..(30)
 <223> Synthetic oligonucleotide primer used as substrate for *Thermus aquaticus* DNA polymerase I

 <400> 49
 aaatacaaca ataaaacgcc acatcttgcg 30

 <210> 50
 <211> 20
 <212> DNA
 <213> Artificial sequence

 <220>
 <223> Synthetic oligonucleotide sequence insert containing PstI restriction site and frame shift for H102A mutant barnase fusion construct fused to p3 gene of phage fd-3.
 <220>
 <221> misc_feature
 <222> (1)..(20)
 <223> Synthetic oligonucleotide sequence insert containing PstI restriction site and frame shift for H102A mutant barnase fusion construct fused to p3 gene of phage fd-3.

<400> 50
ctgcaggcgg tgcggccgca

20

<210> 51

<211> 24

<212> DNA

<213> Artificial sequence

<220>

<223> Synthetic oligonucleotide used for random priming.

<220>

<221> misc_feature

<222> (1)..(24)

<223> Synthetic oligonucleotide used for random priming

<220>

<221> misc_feature

<222> (19)..(19)

<223> n at position 19 can be G, A, T or C.

<220>

<221> misc_feature

<222> (20)..(20)

<223> n at position 20 can be G, A, T or C.

<220>

<221> misc_feature

<222> (21)..(21)

<223> n at position 21 can be G, A, T or C.

<220>

<221> misc_feature

<222> (22)..(22)

<223> n at position 22 can be G, A, T or C.

<220>

<221> misc_feature

<222> (23)..(23)

<223> n at position 23 can be G, A, T or C.

<220>

<221> misc_feature

<222> (24)..(24)

<223> n at position 24 can be G, A, T or C.

<400> 51

gagcctgcag agctcaggnn nnnn

24

<210> 52

<211> 23

<212> DNA

<213> Artificial sequence

<220>

<223> Synthetic PCR primer used to re-amplify randomly amplified E. coli genomic DNA sequence.

<220>

<221> misc_feature

<222> (1)..(23)

<223> Synthetic PCR primer used to re-amplify randomly amplified E. coli genomic DNA sequences.

<400> 52
cgtgcgagcc tgcagagctc agg

23

<210> 53

<211> 45

<212> PRT

<213> Artificial sequence

<220>

<223> Barstar binding barnase-p3 fusion insert.

<220>

<221> MISC_FEATURE

<222> (1)..(45)

<223> Barstar binding barnase-p3 fusion insert

<400> 53

Leu Gln Ser Ser Gly Asp Cys Val Ile Ser Asp Thr Cys Ile Ala Gly
1 5 10 15

Met Ala Glu Ala Ala Ala Cys Glu Glu Lys Phe Ser Ser Gln Asn Val
20 25 30

Gly Leu Thr Ile Thr Val Thr Pro Cys Leu Ser Ser Ala
35 40 45

<210> 54

<211> 44

<212> PRT

<213> Artificial sequence

<220>

<223> Barstar binding barnase-p3 fusion insert.

<220>

<221> MISC_FEATURE

<222> (1)..(44)

<223> Barstar binding barnase-p3 fusion insert

<400> 54

Leu	Gln	Ser	Ser	Gly	Cys	Gly	Ser	Ser	Gly	Ser	Ser	Ile	Asn	Cys	Leu
1				5					10					15	

Pro	Cys	Gly	Ala	Thr	Ser	Arg	Gly	Thr	Ser	Pro	Leu	Ala	Ser	Gly	Leu
			20					25					30		

Pro	Ser	Ser	Ala	Thr	Ile	His	Cys	Leu	Ser	Ser	Ala
		35					40				

<210> 55

<211> 40

<212> PRT

<213> Artificial sequence

<220>

<223> Barstar binding barnase-p3 fusion insert.

<220>

<221> MISC_FEATURE

<222> (1)..(40)

<223> Barstar binding barnase-p3 fusion insert

<400> 55

Leu	Gln	Ser	Ser	Gly	Asp	Ser	Ala	Gly	Cys	Lys	Asn	Met	Thr	Gly	Gly
1				5					10					15	

Arg Leu Tyr Ala His Thr Leu Glu Ala Ile Ile Pro Gly Phe Ala Val
 20 25 30

Ser Ala Pro Ala Cys Glu Pro Ala
 35 40

<210> 56

<211> 33

<212> PRT

<213> Artificial sequence

<220>

<223> Barstar binding barnase-p3 fusion insert.

<220>

<221> MISC_FEATURE

<222> (1)..(33)

<223> Barstar binding barnase-p3 fusion insert

<400> 56

Leu Gln Ser Ser Gly Cys Val Arg Leu Lys Arg Thr Ser Val Asn His
 1 5 10 15

Gln Pro Asp Ala Trp Pro Glu Pro His Leu Lys Ala Ala Cys Glu Pro
 20 25 30

Ala

<210> 57

<211> 44

<212> PRT

<213> Artificial sequence

<220>

<223> Barstar binding barnase-p3 fusion insert.

<220>

<221> MISC_FEATURE

<222> (1)..(44)

<223> Barstar binding barnase-p3 fusion insert

<400> 57

Leu	Gln	Ser	Ser	Gly	Cys	Gly	Ser	Ser	Gly	Ser	Ser	Ile	Asn	Cys	Leu
1				5					10					15	

Pro	Cys	Gly	Ala	Thr	Ser	Arg	Gly	Thr	Ser	Pro	Leu	Ala	Ser	Gly	Leu
			20					25					30		

Pro	Ser	Ser	Ala	Thr	Val	Gln	Cys	Leu	Ser	Ser	Ala
		35					40				

<210> 58

<211> 41

<212> PRT

<213> Artificial sequence

<220>

<223> Barstar binding barnase-p3 fusion insert.

<220>

<221> MISC_FEATURE

<222> (1)..(41)

<223> Barstar binding barnase-p3 fusion insert

<400> 58

Leu	Gln	Ser	Ser	Gly	Lys	Ile	Val	Gln	Ala	Gly	Ala	Asn	Ile	Gln	Asp
1				5					10					15	

Gly Cys Ile Met His Gly Tyr Cys Asp Thr Asp Thr Ile Val Gly Glu
20 25 30

Asn Gly His Ile Gly Leu Ser Ser Ala
35 40

<210> 59

<211> 45

<212> PRT

<213> Artificial sequence

<220>

<223> Barstar binding barnase-p3 fusion insert.

<220>

<221> MISC_FEATURE

<222> (1)..(45)

<223> Barstar binding barnase-p3 fusion insert

<400> 59

Leu Gln Ser Ser Gly Val Cys Val Ile Ser Asp Thr Cys Ile Ala Gly
1 5 10 15

Thr Ala Glu Ala Ala Ala Cys Glu Glu Lys Phe Ser Ser Gln Asn Val
20 25 30

Gly His Thr Ile Thr Glu Thr Pro Cys Leu Ser Ser Ala
35 40 45

<210> 60

<211> 44

<212> PRT

<213> Artificial sequence

<220>

<223> Barstar binding barnase-p3 fusion insert.

<220>

<221> MISC_FEATURE

<222> (1)..(44)

<223> Barstar binding barnase-p3 fusion insert

<400> 60

Leu	Gln	Ser	Ser	Gly	Cys	Gly	Ser	Ser	Gly	Ser	Ser	Ile	Asn	Cys	Leu
1				5					10					15	

Pro	Cys	Gly	Ala	Thr	Ser	Arg	Gly	Thr	Ser	Pro	Leu	Ala	Ser	Gly	Leu
			20					25					30		

Pro	Ser	Ser	Ala	Thr	Ile	Gln	Cys	Leu	Ser	Ser	Ala
		35					40				

<210> 61

<211> 53

<212> PRT

<213> Artificial sequence

<220>

<223> Barstar binding barnase-p3 fusion insert.

<220>

<221> MISC_FEATURE

<222> (1)..(53)

<223> Barstar binding barnase-p3 fusion insert

<400> 61

Leu	Gln	Ser	Ser	Gly	Gln	Asp	Ser	Gln	Arg	Glu	His	Ala	Ser	His	Thr
1				5					10					15	

Ala Glu Asp Asp Cys Glu Asp Gln Thr Arg Ile His Gln His Ile Arg
20 25 30

Glu Val Asp Phe Val Asp Thr Pro Gln Glu Val Asp Asp Cys Arg Ala
35 40 45

Ala Leu Ser Ser Ala
50

<210> 62

<211> 33

<212> PRT

<213> Artificial sequence

<220>

<223> Barstar binding barnase-p3 fusion insert.

<220>

<221> MISC_FEATURE

<222> (1) .. (33)

<223> Barstar binding barnase-p3 fusion insert

<400> 62

Leu Gln Ser Ser Gly Cys Val Arg Leu Lys Arg Thr Ser Val Asn His
1 5 10 15

Gln Pro Asp Ala Trp Pro Glu Pro His Leu Lys Ala Ala Cys Glu Pro
20 25 30

Ala

<210> 63

<211> 9

<212> PRT

<213> Artificial sequence

<220>

<223> Barstar binding barnase-p3 fusion insert.

<220>

<221> MISC_FEATURE

<222> (1)..(9)

<223> Barstar binding barnase-p3 fusion insert

<400> 63

Leu Gln Ser Ser Gly Val Arg Pro Ala
1 5

<210> 64

<211> 44

<212> PRT

<213> Artificial sequence

<220>

<223> Barstar binding barnase-p3 fusion insert.

<220>

<221> MISC_FEATURE

<222> (1)..(44)

<223> Barstar binding barnase-p3 fusion insert

<400> 64

Leu Gln Ser Ser Gly Cys Gly Ser Ser Gly Ser Ser Ile Asn Cys Leu
1 5 10 15

Pro Cys Gly Ala Thr Ser Arg Gly Thr Ser Pro Leu Ala Ser Gly Leu
20 25 30

Pro Ser Ser Ala Thr Ile Gln Cys Leu Ser Ser Ala
 35 40

<210> 65

<211> 30

<212> PRT

<213> Artificial sequence

<220>

<223> Barstar binding barnase-p3 fusion insert.

<220>

<221> MISC_FEATURE

<222> (1) .. (30)

<223> Barstar binding barnase-p3 fusion insert

<400> 65

Leu Gln Ser Ser Gly Thr Glu Val Asp Arg Gly Asn Gln Gln His Asp
 1 5 10 15

Thr Asn Asp Arg Asp Phe Thr His Thr Pro Leu Ser Ser Ala
 20 25 30

<210> 66

<211> 36

<212> PRT

<213> Artificial sequence

<220>

<223> Barstar binding barnase-p3 fusion insert.

<220>

<221> MISC_FEATURE

<222> (1)..(36)

<223> Barstar binding barnase-p3 fusion insert

<400> 66

Leu Gln Ser Ser Gly Val Ala Gln Gly Ser Ser Ala Ser Val Asp Val
1 5 10 15

Thr Ala Thr Asn Ala Val Leu Ser Ala Asp Ser Leu Ser Leu Gly Gly
20 25 30

Gly Glu Pro Ala
35

<210> 67

<211> 19

<212> PRT

<213> Artificial sequence

<220>

<223> Barstar binding barnase-p3 fusion insert.

<220>

<221> MISC_FEATURE

<222> (1)..(19)

<223> Barstar binding barnase-p3 fusion insert

<400> 67

Leu Gln Ser Ser Gly Gly Ala Val Ala Val Thr Pro Gly Pro Val Leu
1 5 10 15

Ser Ser Ala

<210> 68

<211> 18

<212> PRT

<213> Artificial sequence

<220>

<223> Barstar binding barnase-p3 fusion insert.

<220>

<221> MISC_FEATURE

<222> (1)..(18)

<223> Barstar binding barnase-p3 fusion insert

<400> 68

Leu	Gln	Ser	Ser	Gly	His	Cys	Arg	Gly	Lys	Pro	Val	Leu	Cys	Thr	His
1				5					10					15	

Thr Ala

<210> 69

<211> 9

<212> PRT

<213> Artificial sequence

<220>

<223> Barstar binding barnase-p3 fusion insert.

<220>

<221> MISC_FEATURE

<222> (1)..(9)

<223> Barstar binding barnase-p3 fusion insert

<400> 69

Leu Gln Ser Ser Gly Val Arg Pro Ala
 1 5

<210> 70

<211> 36

<212> PRT

<213> Artificial sequence

<220>

<223> Barstar binding barnase-p3 fusion insert.

<220>

<221> MISC_FEATURE

<222> (1)..(36)

<223> Barstar binding barnase-p3 fusion insert

<400> 70

Leu Gln Ser Ser Gly Glu Pro Ala Pro Ala His Glu Ala Lys Pro Thr
 1 5 10 15

Glu Ala Pro Val Ala Lys Ala Glu Ala Lys Pro Glu Thr Pro Ala His
 20 25 30

Leu Ser Ser Ala
 35

<210> 71

<211> 33

<212> PRT

<213> Artificial sequence

<220>

<223> Barstar binding barnase-p3 fusion insert.

<220>

<221> MISC_FEATURE

<222> (1)..(33)

<223> Barstar binding barnase-p3 fusion insert

<400> 71

Leu Gln Ser Ser Gly Cys Val Arg Leu Lys Arg Thr Ser Val Asn His
1 5 10 15

Gln Pro Asp Ala Trp Pro Glu Pro His Leu Lys Ala Ala Cys Glu Pro
20 25 30

Ala

<210> 72

<211> 36

<212> PRT

<213> Artificial sequence

<220>

<223> Barstar binding barnase-p3 fusion insert.

<220>

<221> MISC_FEATURE

<222> (1)..(36)

<223> Barstar binding barnase-p3 fusion insert

<400> 72

Leu Gln Ser Ser Gly Val Val Asp Trp Ala Lys Met Arg Glu Ile Ala
1 5 10 15

Asp Ser Ile Gly Ala Tyr Leu Phe Val Asp Met Ala His Val Ala Ala
20 25 30

Leu Ser Ser Ala
35

<210> 73

<211> 117

<212> DNA

<213> Artificial sequence

<220>

<223> Vector pK1 polylinker sequence.

<220>

<221> misc_feature

<222> (1)..(117)

<223> Vector pK1 polylinker sequence

<400> 73

aatgctggcg gcgggccagc cggcctttct gaggggtcga ctatagaagg acgagggggcc 60

cacgaaggag gtgggggtacc cggttccgag ggtgggtccg gttccggtga ttttgat 117

<210> 74

<211> 39

<212> PRT

<213> Artificial sequence

<220>

<223> Polypeptide encoded by pK1 vector polylinker sequence.

<220>

<221> MISC_FEATURE

<222> (1)..(39)

<223> Polypeptide encoded by pK1 vector polylinker sequence

<400> 74

Asn Ala Gly Gly Gly Pro Ala Gly Leu Ser Glu Gly Ser Thr Ile Glu
1 5 10 15

Gly Arg Gly Ala His Glu Gly Gly Gly Val Pro Gly Ser Glu Gly Gly
20 25 30

Ser Gly Ser Gly Asp Phe Asp
35

<210> 75

<211> 117

<212> DNA

<213> Artificial sequence

<220>

<223> Vector pK2 polylinker sequence.

<220>

<221> misc_feature

<222> (1)..(117)

<223> vector pK2 polylinker sequence

<400> 75
aatgctggcg gcggcccagc cggcctttct gaggggtcga ctatagaagg acgagggccc 60
acgaagcagc tgggggtaccg gttccgaggg tggttccggt tccggtgatt ttgatta 117

<210> 76

<211> 39

<212> PRT

<213> Artificial sequence

<220>

<223> Polypeptide sequence encoded by vector pK2 polylinker region.

<220>

<221> MISC_FEATURE

<222> (1) .. (39)

<223> Polypeptide sequence encoded by vector pK2 polylinker region.

<220>

<221> MISC_FEATURE

<222> (38) .. (38)

<223> X represents a TGA stop codon

<220>

<221> MISC_FEATURE

<222> (36) .. (36)

<223> X represents a stop codon (TGA)

<400> 76

Asn	Ala	Gly	Gly	Gly	Pro	Ala	Gly	Leu	Ser	Glu	Gly	Ser	Thr	Ile	Glu
1				5				10						15	

Gly	Arg	Gly	Pro	Thr	Lys	Gln	Leu	Gly	Tyr	Arg	Phe	Arg	Gly	Trp	Phe
			20					25					30		

Arg	Phe	Arg	Xaa	Phe	Xaa	Leu
			35			

<210> 77

<211> 35

<212> DNA

<213> Artificial sequence

<220>

<223> Sequence of the junction region between Barnase and p3 in recombinant fusion vector fd-3.

<220>

<221> misc_feature

<222> (1)..(35)

<223> Sequence of the junction region between Barnase and p3 in recombinant fusion vector fd-3.

<400> 77

atcagactgc aggcggtgcg gccgcagaaa ctggtt

35

<210> 78

<211> 11

<212> PRT

<213> Artificial sequence

<220>

<223> Amino acid sequence about the junction of Barnase and p3 coding regions of recombinant fusion vector fd-3.

<400> 78

Ile Arg Leu Gln Ala Ala Ala Ala Glu Thr Val
1 5 10

<210> 79

<211> 4

<212> PRT

<213> Artificial sequence

<220>

<223> Factor Xa protease cleavage sequence.

<220>

<221> MISC_FEATURE

<222> (1)..(1)

<223> X can be either Ile or Leu.

<220>

<221> MISC_FEATURE

<222> (1)..(4)

<223> Factor Xa proteolytic cleavage site.

<400> 79

Xaa Glu Gly Arg

1

<210> 80

<211> 6

<212> PRT

<213> Artificial sequence

<220>

<223> Artificial linker peptide.

<400> 80

Ala Gly Gly Ala Ala Ala

1

5